

STATEMENT OF BASIS

for draft Louisiana Pollutant Discharge Elimination System permit No.: LA0003298
to discharge to waters of the State of Louisiana.
AI No.: 1182 / Activity No.: PER20080001

THE APPLICANT IS: Lone Star Industries, Inc. dba Buzzi Unicem USA
14900 Intracoastal Drive
New Orleans, LA 70129

THE FACILITY IS: New Orleans Slag Grinding Plant
14900 Intracoastal Drive
New Orleans, Orleans Parish

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

PREPARED BY: Bonnie Wascom

DATE PREPARED: April 14, 2009

1. PERMIT STATUS

- A. LPDES permit – LA0003298
LPDES permit effective date: April 1, 2004
LPDES modified permit effective date: April 1, 2006
LPDES permit expiration date: March 31, 2009
- B. LWDPs permit – NA
LWDPs permit effective date: NA
LWDPs permit expiration date: NA
- C. Date Application Received: September 30, 2008

2. FACILITY INFORMATION

- A. FACILITY TYPE/ACTIVITY – Slag grinding, cement blending, and bulk material handling facility

This is an existing facility where slag is ground and blended to produce slag cement. In addition, Portland cement, fertilizer, and slag are transshipped and stored at this facility.

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The non-contact cooling water and external truck wash wastewater are routed to a drainage ditch before entering the Gulf Intracoastal Waterway. The cooling tower blowdown is discharged to Michoud Canal before entering the Gulf Intracoastal Waterway. All sanitary wastewater generated at this facility is collected and treated by the local city sewer system.

B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: II
3. Wastewater Type: II
4. SIC code: 3295, 4449

C. LOCATION - 14900 Intracoastal Drive
New Orleans, Orleans Parish
Latitude +30° 01' 34", Longitude -89° 54' 04"

3. OUTFALL INFORMATION

Outfall 109

Discharge Type: non-contact cooling water from the materials transfer air compressor, air compressors in group 1 silos and office building air conditioner

Treatment: none

Location: at the point of discharge from the west side of the maintenance building near the north end of the levee prior to mixing with other waters

Flow: 1,130,000 GPD

Discharge Route: to the stormwater drainage ditch, thence to the Gulf Intracoastal Waterway

Outfall 110

Discharge Type: non-contact cooling water from air compressors in group 2 silos and cooling tower blowdown from group 3 silos

Treatment: none

Location: at the point of discharge near the southeast corner of the group 2 silos prior to mixing with other waters

Flow: 245,000 GPD

Discharge Route: to the stormwater drainage ditch, thence to the Gulf Intracoastal Waterway

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Outfall 210

Discharge Type: external truck wash water
Treatment: gravity settling and pH adjustment
Location: at the point of discharge from the truck wash, located between the truck wash and the group 2 silos and west of outfall 110, prior to mixing with other waters
Flow: 1,800 GPD
Discharge Route: to the stormwater drainage ditch, thence to the Gulf Intracoastal Waterway

Outfall 011

Discharge Type: cooling tower blowdown
Treatment: none
Location: at the point of discharge at the west property boundary prior to mixing with other waters
Flow: 700 GPD
Discharge Route: to Michoud Canal, thence to the Gulf Intracoastal Waterway

Outfall 012 – to be discontinued in this permit reissuance because the outfall was never constructed

Discharge Type: treated sanitary wastewater
Treatment: package treatment plant
Location: at the point of discharge from the treatment plant near the southwest corner of the property prior to mixing with other waters
Flow: 760 GPD
Discharge Route: to Michoud Canal, thence to the Gulf Intracoastal Waterway

4. RECEIVING WATERS

STREAM – Outfalls 109, 110, and 210 – to the stormwater drainage ditch, thence to the Gulf Intracoastal Waterway

BASIN AND SEGMENT – Lake Pontchartrain – Subsegment 041401

DESIGNATED USES -

- a. Primary contact recreation
- b. Secondary contact recreation
- c. Propagation of fish and wildlife

STREAM – Outfall 011 – to Michoud Canal, thence to the Gulf Intracoastal Waterway

BASIN AND SEGMENT – Lake Pontchartrain – Subsegment 041601

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DESIGNATED USES -

- a. Primary contact recreation
- b. Secondary contact recreation
- c. Propagation of fish and wildlife
- d. Oyster Propagation

Oyster Propagation is listed as a designated use of subsegment 041601 (Intracoastal Canal – from Inner Harbor Navigation Canal to Chef Menteur Pass). However, this designated use is applicable only if the discharge is directly into the named waterbody and not into a tributary or distributary of the waterbody, per LAC33:IX.1111.A.

5. EXISTING EFFLUENT LIMITS

Outfall 109 – non-contact cooling water from the materials transfer air compressor, air compressor in group 1 silos and office building air conditioning

Parameter	Limitation Mo. Avg.: Daily Max.	Monitoring Frequency
Flow	---: Report (GPD)	Monthly
Chlorine	---: 0.2 mg/L	Monthly
Temperature	---: Report (°F)	Monthly
TOC (NET)	---: 5 mg/L	Monthly
pH	6.0 – 9.0 s.u.	Monthly

Outfall 110 – once through non-contact cooling water from air compressors in group 2 and 3 silos

Parameter	Limitation Mo. Avg.: Daily Max.	Monitoring Frequency
Flow	---: Report (GPD)	Monthly
Chlorine	---: 0.2 mg/L	Monthly
Temperature	---: Report (°F)	Monthly
TOC (NET)	---: 5 mg/L	Monthly
pH	6.0 – 9.0 s.u.	Monthly

Outfall 210 – external truck wash water

Parameter	Limitation Mo. Avg.: Daily Max.	Monitoring Frequency
Flow	---: Report (GPD)	Quarterly
COD	200: 300* mg/L	Quarterly
Oil & Grease	---: 15 mg/L	Quarterly
TSS	---: 45 mg/L	Quarterly
pH	6.0 – 9.0 s.u.	Quarterly

* COD Daily Maximum <= 125 mg/L if the wash water commingled with storm water

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Outfall 011 – cooling tower blowdown

Parameter	Limitation Mo. Avg.: Daily Max.	Monitoring Frequency
Flow	Report: Report (GPD)	Monthly
Chlorine	--- : 0.2 mg/l	Monthly
Temperature	---: Report (°F)	Monthly
pH	6.0 – 9.0 s.u.	Monthly

Outfall 012 – treated sanitary wastewater

Parameter	Limitation Weekly Avg.	Monitoring Frequency
Flow	Report (GPD)	Semiannually
BOD ₅	45 mg/l	Semiannually
Oil & Grease	15 mg/l	Semiannually
Fecal Coliform	400 colonies / 100 ml	Semiannually
TSS	45 mg/l	Semiannually
pH	6.0 – 9.0 s.u.	Semiannually

6. **PROPOSED EFFLUENT LIMITS**

BASIS – See rationale below.

7. **COMPLIANCE HISTORY/COMMENTS**

A. **Compliance History**

There are no inspections on file as of **April 14, 2009**. There are no open, appealed, or pending OES enforcement actions as of **April 14, 2009**. There is no EPA enforcement history on file as of **April 14, 2009**.

B. **DMR Review/Excursions**

A DMR Review was conducted for the period of January 2006 – March 2009. Thirty-two DMRs were on file for Outfall 109. Thirty-two DMRs were on file for Outfall 110. Temperature for Outfalls 109 and 110 was reported in Celsius instead of the required Fahrenheit. Seven TSS excursions and one pH excursion were reported on seven of the 11 submitted DMRs for Outfall 210. Eleven quarterly DMRs were on file for Outfall 011 and 9 quarterly DMRs were on file for Outfall 012.

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Reported Excursions

Date	Outfall	Parameter	Limit	Reported
October-December 2008	210	TSS	45 mg/l	219
April-June 2008	210	pH	6 – 9 s.u.	2.83
January-March 2008	210	TSS	45 mg/l	101
October-December 2007	210	TSS	45 mg/l	119
July-September 2007	210	TSS	45 mg/l	33
April-June 2007	210	TSS	45 mg/l	90
October-December 2006	210	TSS	45 mg/l	67
July-September 2006	210	TSS	45 mg/l	102
April-June 2006	210	TSS	45 mg/l	320

8. ENDANGERED SPECIES

The receiving waterbodies and proposed discharge are not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

9. 303 (d) LISTED WATERBODIES

Subsegment 041601, Intracoastal Waterway – From Inner Harbor Navigation Canal to Chef Menteur Pass (Estuarine) is listed on LDEQ's Final 2006 303(d) List as impaired for pathogen indicators and Subsegment 041401, New Orleans Leveed Waterbodies (Estuarine) is listed on LDEQ's Final 2006 303(d) List as impaired for organic enrichment/low DO and pathogen indicators. To date no TMDLs have been completed for these waterbodies. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as imposed by a TMDL. Until completion of TMDLs for the Lake Pontchartrain Basin, those suspected causes for impairment, which are not directly attributed to the slag grinding, cement blending, and bulk material handling point source category have been eliminated in the formulation of effluent limitations and other requirements of this permit. Additionally, suspected causes of impairment which could be attributed to pollutants which were not determined to be discharged at a level which would cause, have the reasonable potential to cause or contribute to an excursion above any present state water quality standard were also eliminated. The discharge from this facility does not include sanitary wastewater therefore; the discharge from this facility does not have the potential to contribute to the pathogen indicator impairments.

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10. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

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Rationale for Lone Star Industries, Inc. dba Buzzi Unicem USA

1. **Outfall 109** – non-contact cooling water from the materials transfer air compressor, air compressors in group 1 silos and office building air conditioner

Parameter	Limitation* Mo. Avg.: Daily Max.	Reference
Flow	Report: Report (GPD)	LAC 33:IX.2361.I.1.b
Temperature	---: Report (°F)	Similar discharges (BPJ)
TOC (NET)	---: 5 mg/L	Similar discharges (BPJ)
pH	6.0 s.u. (min.) – 9.0 s.u. (max.)	Similar discharges (BPJ)

Treatment: None

Monitoring Frequency: A performance-based frequency reduction is granted based on past compliance. Once per three months for all parameters at the point of discharge from the west side of the maintenance building near the north end of the levee prior to mixing with other waters.

***Limits Justification:** For all parameters, limits and monitoring frequencies are based on similar discharges. Because chlorine is absent from the process, the chlorine parameter will not be continued in this permit reissuance. The TOC of the discharge shall not exceed the intake TOC by more than 5.0 mg/l.

2. **Outfall 110** – non-contact cooling water from air compressors in group 2 silos and cooling tower blowdown from group 3 silos

Parameter	Limitation* Mo. Avg.: Daily Max.	Reference
Flow	Report: Report (GPD)	LAC 33:IX.2361.I.1.b
Temperature	---: Report (°F)	Similar discharges (BPJ)
TOC (NET)	---: 5 mg/L	Similar discharges (BPJ)
pH	6.0 s.u. (min.) – 9.0 s.u. (max.)	Similar discharges (BPJ)

Treatment: None

Monitoring Frequency: A performance-based frequency reduction is granted based on past compliance. Once per three months for all parameters at the point of discharge near the southeast corner of the group 2 silos prior to mixing with other waters.

***Limits Justification:** For all parameters, limits and monitoring frequencies are based on similar discharges. Because chlorine is absent from the process, the chlorine parameter will not be continued in this permit reissuance. The TOC of the discharge shall not exceed the intake TOC by more than 5.0 mg/l.

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3. **Outfall 210 – external truck wash water**

Parameter	Limitation* Mo. Avg.: Daily Max.	Reference
Flow	Report: Report (GPD)	LAC 33:IX.2361.I.1.b
COD	200: 300 mg/L	Similar discharges (BPJ)
Oil and Grease	---: 15 mg/L	Similar discharges (BPJ)
TSS	---: 45 mg/L	Similar discharges (BPJ)
pH	6.0 s.u. (min.) – 9.0 s.u. (max.)	Similar discharges (BPJ)
Visual Sheen	---: No Presence	Similar discharges (BPJ)

Treatment: Gravity settling and pH adjustment

Monitoring Frequency: Monitoring frequency is increased due to past non-compliance. Once per month for all parameters, with the exception of once per week for visual sheen, at the point of discharge from the truck wash, located between the truck wash and the group 2 silos and west of outfall 110, prior to mixing with other waters, prior to mixing with other waters. Soaps and/or Detergents: document in an inventory record monthly the quantity and type of any Soap and/or Detergent used during each calendar month.

***Limits Justification:** For all parameters, limits and monitoring frequencies are based on current permitting practices for discharges of exterior vehicle and equipment wash wastewater.

4. **Outfall 011 – cooling tower blowdown**

Parameter	Limitation* Mo. Avg.: Daily Max.	Reference
Flow	Report: Report (GPD)	LAC 33:IX.2361.I.1.b
Temperature	---: Report (°F)	Similar discharges (BPJ)
pH	6.0 s.u. (min.) – 9.0 s.u. (max.)	Similar discharges (BPJ)

Treatment: None

Monitoring Frequency: Once per month for all parameters at the point of discharge at the west property boundary prior to mixing with other waters. Because chlorine is absent from the process, the chlorine parameter will not be continued in this permit reissuance.

***Limits Justification:** For all parameters, limits and monitoring frequencies are based on similar discharges.

BPJ Best Professional Judgment
 GPD Gallons per Day
 s.u. Standard Units

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NOTE:

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.

Storm Water Pollution Prevention Plan (SWP3) Requirement

A SWP3 is included in the permit since the stormwater is regulated per LAG33:IX.2511.B.14.

The SWP3 shall be updated and maintained within sixty days from the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see narrative requirements of the Draft Permit).

Monitoring Frequency

Please be aware that the Department has the authority to reduce monitoring frequencies when a permittee demonstrates two or more consecutive years of permit compliance. Monitoring frequencies established in LPDES permits are based on a number of factors, including but not limited to, the size of the discharge, the type of wastewater being discharged, the specific operations at the facility, past compliance history, similar facilities and best professional judgment of the reviewer. We encourage and invite each permittee to institute positive measures to ensure continued compliance with the LPDES permit, thereby qualifying for reduced monitoring frequencies upon permit reissuance. If the Department can be of any assistance in this area, please do not hesitate to contact us. As a reminder, the Department will also consider an increase in monitoring frequency upon permit reissuance when the permittee demonstrates continued non-compliance.